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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO		
10/009,950 12/14/2001		12/14/2001	Akira Nakamura	31671-176197	31671-176197 7278		
26694	7590	03/31/2006		EXAM	EXAMINER		
VENABLE LLP				BERTOGLIO, VALARIE E			
P.O. BOX 34				ART UNIT	PAPER NUMBER		
WASHINGTON, DC 20045-9998				L	TALERTOMBER		
				1632			

DATE MAILED: 03/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

· -		Application	n No.	Applicant(s)	
	·	10/009,950		NAKAMURA ET AL.	
	Office Action Summary	Examiner Art Unit		Art Unit	
		Valarie Be	rtoglio	1632	
Period fo	The MAILING DATE of this communication app or Reply	pears on the	cover sheet with the o	correspondence ac	ddress
A SH THE - Exte after - If the - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPL' MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	36(a). In no every within the statuwill apply and wile, cause the appli	nt, however, may a reply be tir tory minimum of thirty (30) day I expire SIX (6) MONTHS from cation to become ABANDONE	nely filed vs will be considered time the mailing date of this of D (35 U.S.C. § 133).	dy. communication.
Status					
. —	Responsive to communication(s) filed on This action is FINAL . 2b) This Since this application is in condition for alloward closed in accordance with the practice under Expression 1.	action is no	for formal matters, pro		e merits is
Disposit	ion of Claims				
5)⊠ 6)⊠ 7)□	Claim(s) 12 and 13 is/are pending in the application of the above claim(s) is/are withdraw Claim(s) 1 and 3 is/are allowed. Claim(s) 12 and 13 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or	wn from cor			
Applicat	ion Papers				
10)⊠	The specification is objected to by the Examine The drawing(s) filed on 12/14/2001 is/are: a) Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex	accepted of drawing(s) be tion is require	e held in abeyance. Se ed if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 C	
Priority ι	ınder 35 U.S.C. § 119				
a)	Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureau See the attached detailed Office action for a list	s have beer s have beer rity docume u (PCT Rule	n received. n received in Applicati nts have been receive e 17.2(a)).	ion No ed in this National	Stage
Attachmen	t(s) e of References Cited (PTO-892)		4) Interview Summary	(PTO-413)	
2) Notic 3) Infon	the of References Cited (FTO-032) the of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date		Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate	O-152)

DETAILED ACTION

Applicant's reply dated 12/29/2005 has been entered. Claims 1 and 3 have been amended. Claims 12 and 13 have been added. Claim 1,3,12 and 13 are pending, and are under consideration.

Claim Rejections - 35 USC § 112-1st paragraph

New Matter

Claims 12 and 13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. 37 CFR 1.118 (a) states that "No amendment shall introduce new matter into the disclosure of an application after the filing date of the application".

The newly added claims contain the terminology "deletion" and "translocation". Literal support for this terminology is not found in the specification.

MPEP 2163.06 notes "If new matter is added to the claims, the examiner should reject the claims under 35 U.S.C. 112, first paragraph - written description requirement. In re Rasmussen, 650 F.2d 1212, 211 USPQ 323 (CCPA 1981)." MPEP 2163.02 teaches that "Whenever the issue arises, the fundamental factual inquiry is whether a claim defines an invention that is clearly conveyed to those skilled in the art at the time the application was filed. If a claim is amended to include subject matter, limitations, or terminology not present in the application as filed, involving a departure from, addition to, or deletion from the disclosure of the application as filed, the examiner should conclude that the claimed subject matter is not described in that application. MPEP 2163.06 further notes "When an amendment is filed in reply to an objection or rejection based on 35 U.S.C. 112, first paragraph, a study of the entire application is often necessary to determine whether or not "new matter" is involved. Applicant should therefore specifically point out the support for any amendments made to the disclosure" (emphasis added).

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Enablement

Claims 12 and 13 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the claimed mouse wherein the genetic mutation is a deficiency or substitution, does not reasonably provide enablement for the claimed mouse wherein the genetic mutation is a translocation. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims.

Enablement is considered in view of the Wands factors (MPEP 2164.01(a)). The court in Wands states: "Enablement is not precluded by the necessity for some experimentation such as routine screening. However, experimentation needed to practice the invention must not be undue experimentation. The key word is 'undue,' not 'experimentation.' " (Wands, 8 USPQ2d 1404). Clearly, enablement of a claimed invention cannot be predicated on the basis of quantity of experimentation required to make or use the invention. "Whether undue experimentation is needed is not a single, simple factual determination, but rather is a conclusion reached by weighing many factual considerations." (Wands, 8 USPQ2d 1404). The factors to be considered in determining whether undue experimentation is required include: (1) the quantity of experimentation necessary, (2) the amount or direction or guidance presented, (3) the presence or absence of working examples, (4) the nature of the invention, (5) the state of the prior art, (6) the relative skill of those in the art, (7) the predictability or unpredictability of the art, and (8) the breadth of the claims. While all of these factors are considered, a sufficient amount for a prima facie case are discussed below.

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The claims encompass inactivation of the FcyRIIB gene by genetic mutation wherein the mutation is a translocation. Translocation mutations are known in the art to involve translocation of part of one chromosome onto another chromosome, placing translocated genes in a different context on a different chromosome while disrupting function of genes on the native chromosome. The specification is not enabling for such a mutation. The specification does not even contemplate chromosomal translocation. There is no known method of targeting a translocation such that the FcyRIIB locus would be affected and no spontaneous translocation involving inactivation of FcyRIIB has been made of record. Furthermore, it would be unpredictable what the phenotype of such a mouse would be in light of the nature of translocations affecting multiple loci including those at and surrounding chromosomal breakpoints. Thus, the specification is not enabling for the claimed translocation. It is again noted that claims 12 and 13 are superfluous in light of the breadth of claim 1 encompassing any inactivating genetic mutation. Such an inactivation encompasses deficiencies and insertions at the FcyRIIB.

Claim Rejections - 35 USC § 112-2nd paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The rejection of claims 1 and 3 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention is withdrawn in light of Applicant's amendments to the claims.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The rejection of claims 1 and 3 under 35 U.S.C. 103(a) as being unpatentable over Kalluri et al (Nov. 1997, J. Clin. Invest, 100:2263-2275) and Kalluri (1994, PNAS, Vol. 91, pages 6201-6205; IDS) and Abbate (1998, Kidney International, Vol. 54, pages 1550-1561; IDS), in view of Takai (1996, Nature, Vol. 379, pages 346-348; IDS) and Yuasa et al (Jan. 1999, J Exp. Med, 189:187-194), further in view of Kulluri et al (1995, J Am Soc Nephrol, 6:1178-1185) is withdrawn.

Applicant has argued that previous Goodpasture's models, specifically that of Kalluri et al, were made using the a3NC1 domain of type IV collagen and that when assembled into the α3NC1 hexamer, the pathogenicity is lost (see Kalluri, paragraph bridging columns at page 6204). The art taught that dissociation of type IV collagen is necessary to obtain pathogenicity and autoimmune response. The instant claims are drawn to use of type IV collagen, which is not the α 3NC1 domain used in the art. Applicant points out the complex nature of the mechanism of the development of Goodpasture's syndrome. These arguments are persuasive in establishing that it would have been unpredictable at the time of filing that type IV collagen would have been effective at eliciting the claimed phenotypes in the model of the instant invention.

Applicant's remaining arguments are moot in light of the withdrawal of the rejection.

Conclusion

Claims 1 and 3 are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Valarie Bertoglio whose telephone number is (571) 272-0725. The examiner can normally be reached on Mon-Thurs 5:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram Shukla can be reached on (571) 272-0735. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Valarie Bertoglio Examiner Art Unit 1632

> SCOTT D. PRIEBE, PH.D PRIMARY EXAMINER

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